

Practitioner's Docket No. JNP-0007



"PATENT"

#5  
7/20/01  
JC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Paul J. Berlowitz, et al.

U.S. Serial No.: 09/625,249

Filed: July 25, 2000

IMPROVED STABILITY FISCHER-  
TROPSCH DIESEL FUEL AND A  
PROCESS FOR ITS PRODUCTION

Before The Examiner:

Margaret B. Medley

Group Art Unit 1714

Commissioner for Patents  
Washington, D.C. 20231

Sir:

DECLARATION TRAVERSING  
GROUND FOR REJECTION (37 C.F.R. § 1.132)

RECEIVED  
JUL 18 2001  
TC 1700 MAIL ROOM

I, Paul J. Berlowitz, declare that:

1. I am an employee of ExxonMobil Research and Engineering which is assignee of this invention. I have been an employee for 13 years. I have worked for Corporate Strategic Research since 1995. I received my Doctorate degree in Chemical Engineering from Northwestern University in 1986.
2. I have read and am familiar with the First Office Action dated March 5, 2001.
3. I have read and am familiar with the Application.
4. I understand that the present invention relates to stable, inhibited middle distillates and their preparation. More particularly, this invention relates to stable, inhibited middle distillates, useful as fuels, e.g., kerosene, diesel, or as fuel blending components, in which a Fischer-Tropsch derived distillate and a virgin distillate are blended.



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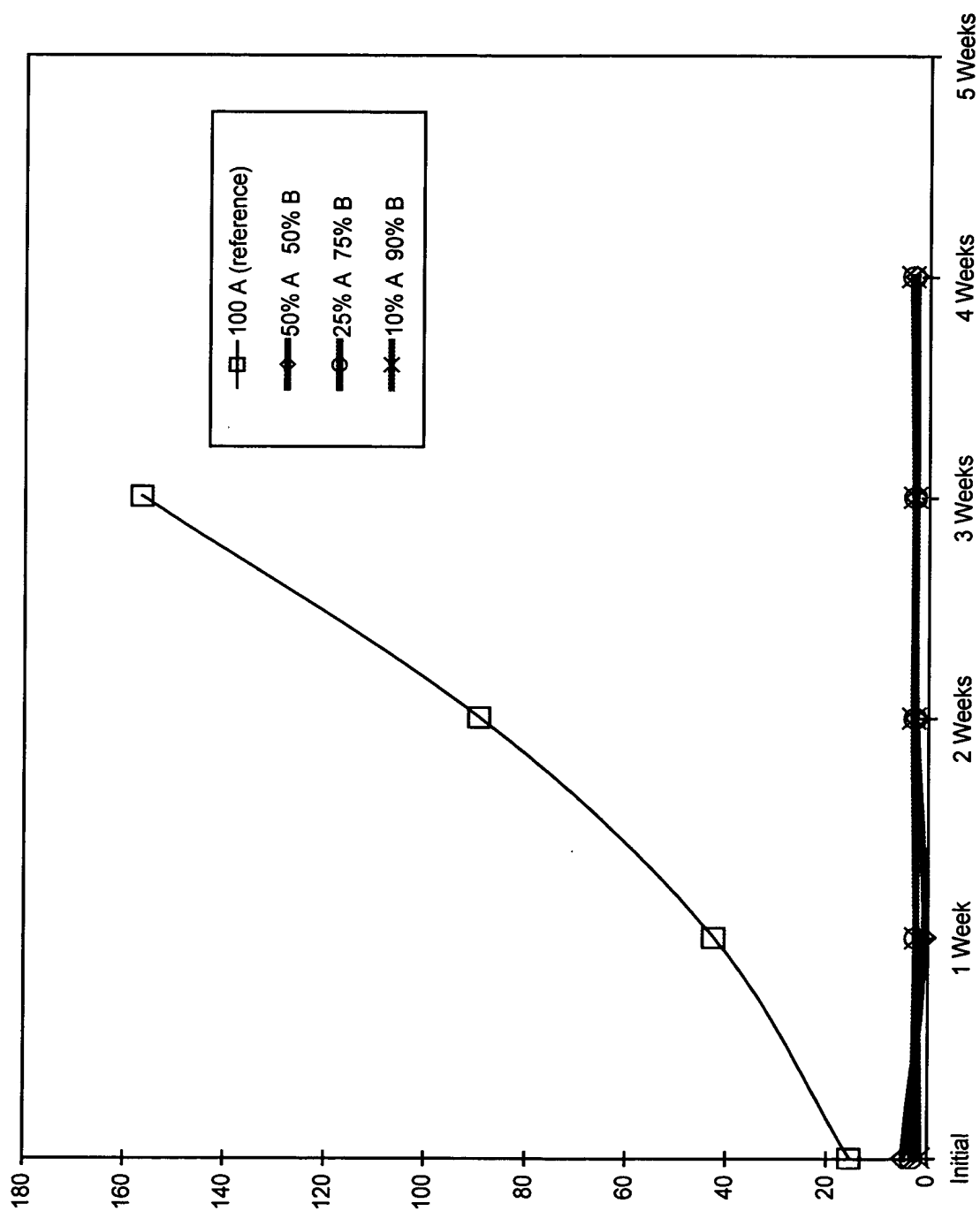
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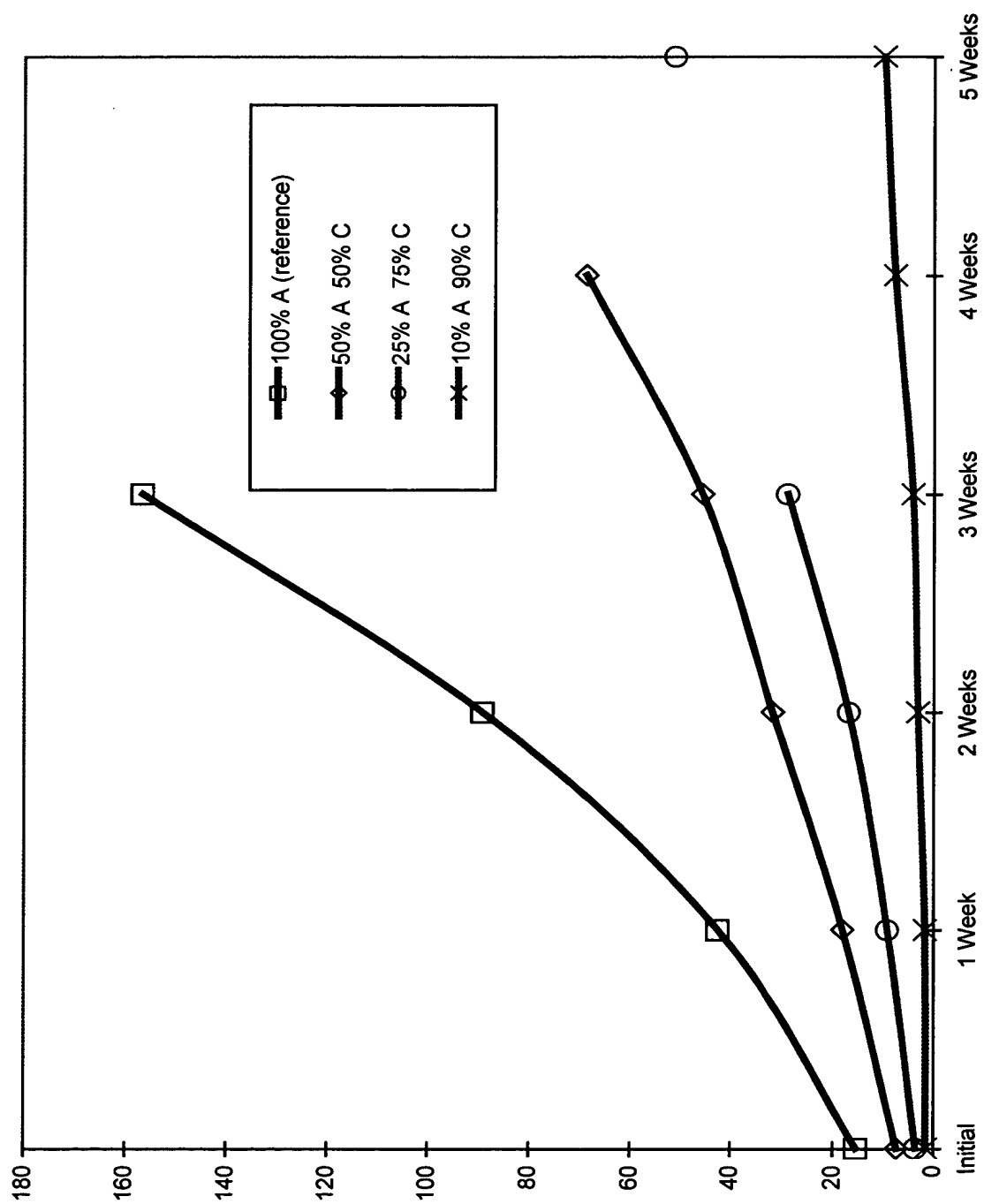
5. I understand that one of the Examiner's objections to this invention is that it is obvious in light of Application 09/138,130 (which has matured to patent U.S. 6,180,842 B1). I understand that the broadest claim of the '842 patent only claims a maximum blend of 1-40% virgin distillate with the Fischer-Tropsch product.
6. The present invention claims enhanced stability for any range of blends of virgin distillate and Fischer-Tropsch product so long as the blended sulfur is equal to or greater than 2 ppm.
7. For the following data:
  - Sample A is identical to the product AGC-21 in the 138,130 Application.
  - Sample B is identical to the "high sulfur virgin distillate" found in the '130 Application.
  - Sample C is identical to the "low sulfur virgin distillate" found in the '130 Application.
8. I submit the following data which demonstrates that blends of greater than 40% virgin distillate to Fischer-Tropsch fuels shows unexpectedly improved stability characteristics.
  - Table 1 details the Peroxide Number v. Time for various blends of the Samples.
  - Chart 1 is a graph of the Peroxide Numbers v. Time of various blends of Sample A and Sample B.
  - Chart 2 is a graph of the Peroxide Numbers v. Time of various blends of Sample A and Sample C.

TABLE 1

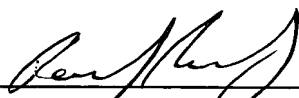
Peroxide Numbers v. Time

% A	Blends		Initial	1 Week	2 Weeks	3 Weeks	4 Weeks	5 Weeks
	% B	% C						
100			15.45	42.48	89.2	156.53		
50	50		4.79	.7	2.53	2.64	2.71	
25	75		3.11	2.33	2.64	2.78	3.18	
10	90		1.65	2.32.	2.9	2.8	3.4	
50		50	7.39	18.11	31.8	45.57	68.75	
25		75	3.57	9.21	16.94	28.85		51.06
10		90	1.57	1.69	3.13	4.15	7.72	9.83





9. These data demonstrate that the addition of even small amounts of Fischer-Tropsch product blended into virgin distillate produce significant improvements in stability far beyond the linear response that would be expected.

  
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Paul J. Berlowitz

  
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Date

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